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## WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS PATENT OF THE UNITED STATES IS:

1. An essentially pure noribogaine compound having the formula:

wherein R is hydrogen or a hydrolyzable group of the formula:

wherein X is an unsubstituted  $C_1-C_{12}$  group or a  $C_1-C_{12}$  group substituted by lower alkyl or lower alkoxy groups, wherein said noribogaine compound having said hydrolyzable group hydrolyses in vivo to form 12-hydroxy ibogamine.

- 2. The noribogaine compound of Claim 1, wherein X is  $C_1-C_6$  group.
- 3. The noribogaine compound of Claim 2, wherein X is methyl or ethyl.
- 4. The noribogaine compound of Claim 1, wherein R is benzoyl.
- 5. The noribogaine compound of Claim 1, wherein is hydrogen.
- 6. A pharmaceutical composition for treating chemical dependency in a mammal, which comprises:

a) an amount of one or more noribogaine compounds having the formula:

wherein R is hydrogen or a hydrolyzable group of the formula:

wherein X is an unsubstituted  $C_1-C_{12}$  group or a  $C_1-C_{12}$  group substituted by lower alkyl or lower alkoxy groups, effective to reduce craving for a chemical substance in said mammal, thereby treating the chemical dependency, and

- b) a pharmaceutically acceptable excipient.
- 7. The pharmaceutical composition of Claim 6, wherein in said noribogaine compound, X is  $C_1-C_6$  group.
- 8. The pharmaceutical composition of Claim 7, wherein X is methyl or ethyl.
- 9. The pharmaceutical composition of Claim 6, wherein R is benzoyl.
- 10. The pharmaceutical composition of Claim 6, wherein said R is hydrogen.

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- 11. A method of treating chemical dependency in a mammal, which comprises administering to said mammal an amount of the noribogaine compound of Claim 1 or the pharmaceutical composition of Claim 6 effective to treat said chemical dependency.
- 12. The method of Claim 11, wherein said mammal is human.
- 13. The method of Claim 11, wherein said chemical dependency is to a substance selected from the group consisting of heroin, cocaine, alcohol, nicotine, amphetamine, methamphetamine, opium, methadone, hycodan, morphine and caffeine.
- 14. The method of Claim 11, wherein said noribogaine compound is 12-hydroxy ibogamine.
- 15. A method of treating addiction to a drug in a mammal in need thereof, which comprises administering to said mammal an amount of the noribogaine compound of Claim 1 or the pharmaceutical composition of Claim 6 effective to reduce craving or withdrawal symptoms or both for said drug.
- 16. The method of Claim 15, wherein said memmal is human.
- 17. The method of Claim 15, wherein said drug is selected fr m the group consisting of heroin, cocaine, methamphetamine, opium, methadone, hycodan, morphine, amphetamine, alcohol, caffeine and nicotine.

18. The method of Claim 15, wherein withdrawal symptoms from the drug are reduced.